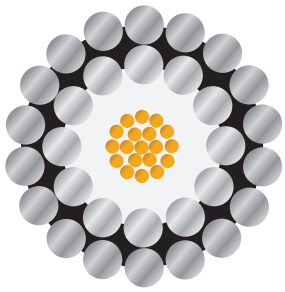
# 5/16" 322 MONOCONDUCTOR S77 (12/18)

**8.18 mm**

**CONDUCTOR:** Copper, Nickel Plated, Water Blocked.
**INSULATION:** PFA/ETFE.
**ARMOR:** SUPA 75 (UNS S31277)

Special Sealant is applied between armor layers.



| Construction Characteristics | | English | Metric |
|---|---|---|---|
| Conductor – # 15 AWG, 19 x 0.0142″ | dia. | 0.071" | 1.803 mm |
| Wall Thickness: | | 0.042" | 1.067 mm |
| Insulation - OD: | dia. | 0.155" | 3.937 mm |
| Armor – Inner: 12 wires 0.0445″ | dia. | 0.233" | 5.918 mm |
| Armor – Outer: 18 wires 0.0445″ | dia. | 0.322" | 8.179 mm |

| Mechanical Characteristics | | English | Metric |
|---|---|---|---|
| Weight in Air | | 206 lb/kft | 307 kg/km |
| Weight in Water | | 176 lb/kft | 262 kg/km |
| Minimum Breaking Strength, Ends Fixed | | 10,600 lbf | 47.15 kN |
| Minimum Wire Break Strength (In/Out) | | 387/387 lbf | 1721/1721 N |
| Maximum Working Load | | 5,830 lbf | 25.93 kN |
| Temperature Rating (Maximum) | | 500°F | 260°C |
| Suggested Minimum Sheave | dia. | 18" | 457 mm |
| Stretch Coefficient (Nominal) | | 1.1 ft/kft/klb | 1.24 m/km/5kN |
| Outside Diameter | 0.322″ | +0.005" -0.002" | 8.18 mm +0.127 mm -0.051 mm |

| Electrical Characteristics | English | Metric |
|---|---|---|
| **1ZATL** | | |
| Temperature Rating | 1 hr 550° 8 hr 500° Cont. 450° | 1 hr 260° 8 hr 232° Cont. 204° |
| Voltage Rating | 1500 VDC | 1500 VDC |
| D.C. Conductor Resistance at 68° F (20° C) (Maximum) | 2.8 Ω/kft | 9.2 Ω/km |
| D.C. Armor Resistance at 68° F (20° C) (Maximum) | 10.4 Ω/kft | 34.1 Ω/km |
| Capacitance Conductor to Armor (Maximum) | 48 pf/ft | 157 pf/m |
| Insulation Resistance (Minimum) @ 500 VDC | 1500 MΩ/kft | 5000 MΩ/km |